

Serial No: 10/009,429

5

Art Unit: 3727

REMARKS

Claims 1-13 and 15-33 were examined, with claims 1, 9, 12, 13, 22 and 28 being independent claims. In the present Response, the number of independent claims has been reduced to only two independent claims and claims 12-21 and 26-33 have been canceled. Canceled claims 28-33 were withdrawn, being directed to a method, and may be the subject matter of a separate divisional application. Upon entry of this Amendment, claims 1-11 and 22-25 will be pending in the application.

Rejection under 35 U.S.C. §103(a)

Claims 1-13 and 15-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Han et al, U.S. Patent No. 4,934,544 in view of McCarthy U.S. Patent No. 5,004,111. The Examiner's position is that Han et al discloses the claimed invention except for the fold being in the uppermost layer only, and that McCarthy teaches that it is known to provide a grasping tab and fold from the uppermost layer alone(see element 24 in McCarthy).

It is noted that both of these patents have common inventors and a common assignee and were filed on the same day, February 27, 1989.

Han et al Reference

Han et al discloses an inner seal 18 with a first sealing portion 20, a second sealing portion 22, and a fold-over portion 24 positioned between the first sealing portion 20 and the second sealing portion 22. Refer to Figs. 1-3. Each portion 20, 22, 24 is formed from a single continuously extending sheet of common layered material. The composite foil 30 from which the innerseal 18 is formed includes a plurality of layers 32, 36, 40 with adhesive layers 34, 38 being provided between the layers as shown in FIG. 3. In Han, each layer of the composite foil 30 is included in the fold-over portion 24. Han et al fails to disclose a film composite for a container enclosure in which only the uppermost layer of the film composite comprises an upwardly projecting fold.

Han et al, in column 3, starting at line 20 specifically describes the various portions as "all formed from a single continuously extending sheet of common layered material". See also

Serial No: 10/009,429

6

Art Unit: 3727

column 7 and the description of Fig. 8 where it is clear that the several layers together form the fold-over portion 24. Fig. 8 is described as a diagrammatic view of an inner seal according to the embodiment of Fig. 3. This includes the folding over of the entire "layered material 30". Refer also to Han et al at column 8 starting at line 34 and the description of Fig. 11 where it is clear that the blank 106 is a layered arrangement as in, for example, Fig. 3 with the fold-over section 106 extending to the very edge of the cut blank, corresponding to the shape of the rim 16.

We also ask the Examiner to take note of the fact that, because in Han et al they teach only the folding of all layers to form their tab, at the area where their inner seal 18 seals with the container rim, a significant opening or tunnel naturally occurs directly at the base of the fold. To clearly illustrate this the applicant encloses herewith a sketch A that depicts the actual fold portion 24 in Han et al and the opening at "T". It is further noted that, in accordance with the present invention, because only the upper layer is folded there is no such corresponding opening or tunnel formed at the sealing surface. Refer to Figs. 2 and 3 of the present application. This opening in Han et al forms an irregularity at the sealing surface that leads to problems with their structure as discussed below.

In Han et al it is also noted that they do not provide any "gap" (as in McCarthy) to form a "tab", but instead have the complete, solid sealing disc folded in such a way that the complete element provides the tab. A thorough review of this reference shows no teaching or suggestion of folding only one layer in forming their tab.

It is the applicants position that, because of the aforementioned sealing irregularity formed by their illustrated opening or tunnel "T", in all disclosed embodiments in Han et al the removal process involves a jagged tearing of the tab, such as is illustrated in Fig. 10 of Han et al. First, the very existence of this opening T is cause for concern in that there is not a proper and consistent seal at that location at the rim. Second, additional adhesive may be necessary at this opening and the result of that is an inconsistent adhesive application that will definitely lead to a jagged tearing of the tab when an attempt is made to remove the seal. Third, if the process of Fig.

Serial No: 10/009,429

7

Art Unit: 3727

11 of Han et al is used, applying inductive heating, there is clearly no sealing at area T and thus there is an attendant weakness in the seal.

This opening or tunnel T, which is triangular in shape, is the weakest part of the entire seal. At that area, even if only slight pressure is applied to create any force thereat, this action will lift the sealing disc on both sides of the triangular area from the top rim of the container. Thus, between the questionable seal at the tunnel T and the possible lifting of the seal about this area, there is ample opportunity for contamination by particles passing from the outside into the contents of the container.

It is also noted that in Han et al they mention that in the Fig. 8 version, the layered material 30 separates cleanly from rim 16 when the innerseal 18 is being removed. However, it is the applicants position that, in practice, their tab does not remove cleanly, due primarily to the formation of the irregularity at opening T. Rather, upon removal a tearing occurs in a manner similar to their illustration in their Fig. 10.

McCarthy Reference

McCarthy discloses an inner seal 20 that includes a tab portion 24 attached to circular body portion 22. Refer to Figs. 1-3. Actually in the many different versions described in this reference in Figs. 1-10 they are all characterized by the use of a top layer or layers that comprise a "free" tab defined by a gap (in Fig. 3 between layers 36 and 40) that is necessary to form their "tab portion 24". Nowhere in this reference do they make any mention of a "fold". Their tab portion 24 is not a "fold". The definition of a fold is "a part that has been folded over or against another part". No such "fold" is taught in McCarthy.

McCarthy is nothing more than the type of design discussed in the background of the present application. (See Substitute Specification at Page 3, Lines 4-27). As noted in the background, the loose tab portion 24 of uppermost layer 40 of McCarthy is disadvantageous because: 1) it involves a laborious laminating process to obtain the partial layer of adhesive 38; and 2) the loose end or tab portion 24 is susceptible to buckling, creasing and destruction as a result of the friction involved in rotating the screw closure. Because the "free" tab in McCarthy is subject to distortion or damage from the screw cap, the tab is apt to be unsafe and weak. If the

Serial No: 10/009,429

8

Art Unit: 3727

interior of the cap even slightly touches the outer circumference of the tab it can be easily distorted resulting in irreparable damage to the sealing member.

A thorough review of this reference shows no teaching or suggestion of a "fold" to form a tab.

Applicants Position

The Examiner has acknowledged that the Han et al reference fails to disclose the fold being only in the uppermost layer, and is relying on the teachings of McCarthy for the disclosure that it is known to provide "a grasping tab and fold from the uppermost layer" alone (referring to element 24). The Examiner has concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to provide the composite film of Han et al with the fold and grasping tab being formed by the uppermost layer alone, in order to reduce the amount of material used by providing a single layer in the folding tab.

Applicant respectfully traverses this rejection.

The first rejection is based upon Han et al as the main reference and McCarthy as the secondary reference. In other words the Examiner argues that it is obvious to provide the Han et al composite film with the McCarthy "fold and grasping tab being formed by the uppermost layer alone". First, it is clear that the tabs in either reference are meant for the same purpose, namely, to enable one to grasp and remove the seal. Each reference describes a different way of accomplishing this. There is no teaching in either reference as to how one would take portions of either reference and combine them to make a modified seal. They simply represent two different ways of making a seal.

Moreover, the McCarthy reference does not even teach a "fold". The word "fold" appears nowhere in this reference. The definition of a fold is "a part that has been folded over or against another part". No such "fold" is taught in McCarthy. A "freely" extending tab, as taught in McCarthy, is not a "fold". Accordingly, what would one skilled in the art take from McCarthy to apply to Han et al? The only obvious substitution regarding these references would be to substitute the tab arrangement (24) in McCarthy for the entire fold-over portion (24) in Han et al. Such a substitution does not teach the structure of the present invention. For there to be a proper

Serial No: 10/009,429

9

Art Unit: 3727

obviousness rejection there has to be a suggestion in either of the references to make the claimed combination. Where is the suggestion in either reference to fold only the uppermost layer? The clear answer is that there is no such suggestion in either reference.

For there to be a proper obviousness rejection, there has to be found in one of the two references a suggestion that one takes only the uppermost layer of the multi-layer arrangement and forms a fold with only that layer to form the tab. There is no such suggestion in either reference. In McCarthy there is not even a suggestion or teaching of a "fold". Where is the suggestion in Han et al to take the tab 24 of McCarthy and modify Han et al by taking only their uppermost layer, such as layer 40 in Fig. 3 of Han et al, and folding only that layer to form the tab? As indicated, McCarthy does not even teach a "fold". The clear answer is that there is no suggestion to do that in either reference.

It is also clear that these two references were filed on the same day with common inventors and were filed as two separate applications maturing into two separate patents. They were apparently considered by the common assignee as two separate and distinct designs. At that time, if this had been an obvious variation, it would have been expressed, or at least suggested, in either or both of these patents. It was not. It was several years later when the present inventors originated this sealing member, and at a time when they were fully aware of the existence of at least the McCarthy reference.

The second main rejection is based upon McCarthy as the main reference and Han et al as the secondary reference. In other words the Examiner argues that it is obvious to provide the McCarthy composite film with the Han et al "double fold". The same argument as presented above also applies to this combination as set forth by the Examiner. From the Han et al teaching where is the suggestion to fold any layer in McCarthy? There is no suggestion. Han et al teaches folding all layers to provide the tab. There is no suggestion from Han et al to fold any layer at all and certainly no teaching or suggestion to fold only the layer 24 in McCarthy. There is no suggestion in McCarthy to provide any fold of the uppermost layer. McCarthy does not even teach a "fold".

Serial No: 10/009,429

10

Art Unit: 3727

The present invention must also be considered in light of certain drawbacks with existing seals that were overcome by the structure of the present invention as claimed herein. These improvements are neither anticipated by nor are they obvious in view of the cited references and are the basis of patentably subject matter. The applicant has already pointed out substantial flaws in the teachings of these two references. In McCarthy the loose end or tab portion 24 is susceptible to buckling, creasing and destruction as a result of the friction involved in rotating the screw closure. Han et al also has been pointed out as having substantial drawbacks, not the least of which relates to the manner in which they form their tab by folding over their entire layered structure, thus forming the troublesome sealing irregularity, illustrated at "T" in the attached sketch A.

An observation of these two references does not lead one skilled in the art to a solution of the aforementioned problems. The Examiner is using hindsight in making this rejection, without any basis in the teaching of these references.

In contrast, in the present invention, the layers, other than the upper-most layer, are directly aligned with the circumference of the opening or rim of the container. In particular, the lower-most layer is parallel with the rim surface and seals uniformly and directly about the entire rim. No so-called tunnel has been formed and thus there is no chance for any particles or the like to get into the interior of the container.

In the structure of the present invention there is a triangular shaped area, but this is only formed between the upper-most layer and the one below that layer. In that area there is no sealing problem because the sealing with the container rim is below that area between a lower-most layer and the rim. Also, in accordance with the structure of the present invention, there is no weakening, nor the formation of any irregularity, because that area is only connected with the upper-most layer. Another advantage is that with the structure of the present invention one need not enhance, or supplement with adhesive, the sealing effect at the rim. This arrangement provides a simpler and more effective means of cleanly and effectively removing the sealing member or tab from the container rim.

Serial No: 10/009,429

11

Art Unit: 3727

It is the Applicants' further position that the Examiner has failed to factually establish a *prima fascia* case of obviousness herein. The Examiner has used hindsight reasoning to extend the teachings of the relied upon patents by in essence incorporating the concepts of the present invention in the Examiner's reasoning.

According to the C.C.P.A.:

A rejection based on section 103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, all facts must be considered. The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis. ... [w]e may not resolve doubts in favor of the Patent Office determination when there are deficiencies in the record as to the necessary factual bases supporting its legal conclusion of obviousness.

In re Warner and Warner, 154 U.S.P.Q. 173, 177-178 (C.C.P.A. 1967).

So, refer to a more recent case In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ 2d 1453, 1457-48 (Fed. Cir. 1998). The following language from this case clearly supports the Applicants' position that the Examiner has not made a proper case for obviousness.

. . . the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. Cf Gechter v. Davidson, 116 F.3d 1454, 43 USPQ2d 1030 (Fed. Cir. 1997) explaining that the Board's opinion must describe the basis for its decision). In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.

To further the prosecution of this application the applicant has now reduced the number of claims in the application in readiness for appeal. Instead of 6 separate independent claims, the

Serial No: 10/009,429

12

Art Unit: 3727

application, per this amendment, has now been reduced to two independent claims, namely claims 1 and 22.

Amended Claims

As indicated previously, claims 12-21 and 26-33 have been canceled from the application and the total number of independent claims has now been reduced to a total of two independent claims. Claim 1 now recites that the fold is only in the uppermost layer and is formed by a portion of the uppermost layer being laid double between a fold bottom and a fold tip. Claim 1 further recites that a contiguous portion of the adhesive layer extends within the laid double portion. This language in claim 1 should make it clearly patentably distinguishing over the prior art relied upon by the Examiner.

Similar amendments have also been made in claim 22. Claim 22 now specifically defines an upwardly projecting fold disposed only in the upper layer and formed by a portion of the upper layer beam laid double between a full bottom and a full tip. Claim 22 also recites that the upper layer within the fold receives a portion of the adhesive layer therein.

It is also noted that some amendments have been made in dependent claims. For example, claims 9 and 25 further recite a lower most layer for providing a tight seal engagement about the entire opening peripheral edge. Because, in Han et al., their fold arrangement provides the aforementioned "tunnel" there is not a tight seal about the entire open peripheral edge.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicants respectfully submit that all of the claims pending in the above-identified application are in condition for allowance, and a notice to that effect is earnestly solicited.

If the present application is found by the Examiner not to be in condition for allowance, then the Applicants hereby request a telephone or personal interview to facilitate the resolution of any remaining matters. Applicants' attorney may be contacted by telephone at the number indicated below to schedule such an interview.

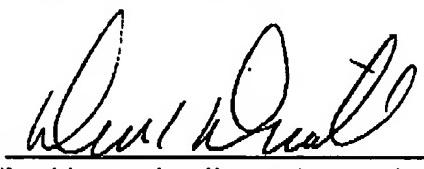
Serial No: 10/009,429

13

Art Unit: 3727

The U.S. Patent and Trademark Office is authorized to charge any additional fees incurred as a result of the filing hereof or credit any overpayment to our Deposit Account No. 19-0120.

Respectfully submitted,
Horst Trombach, Applicant

By: 

David M. Driscoll, Reg. No. 25,075
Applicants' Attorney
SALTER & MICHAELSON
321 South Main Street
Providence, Rhode Island 02903
Telephone: 401/421-3141
Facsimile : 401/861-1953
Customer No. 000987

Date: May 24, 2005

F:\Data\Zinsel, Martin\Trombach 02576\Response to 03 04 05 OA.wpd